

Aquatic Animal Health Standards Commission
Report - March 2006

CHAPTER 3.1.5.

INFECTION WITH *MARTEILIA REFRINGENS*

Article 3.1.5.1.

For the purposes of the *Aquatic Code*, infection with *Marteilia refringens* means infection only with *Marteilia refringens*.

Methods for surveillance, diagnosis and confirmatory identification are provided in the *Aquatic Manual*.

Article 3.1.5.2.

Susceptible species Scope

The recommendations in this Chapter apply to For the purposes of the *Aquatic Code*, susceptible species for infection with *Marteilia refringens* are: European flat oyster (*Ostrea edulis*), Australian mud oyster (*O. angasi*), Argentinean oyster (*O. puelchana*) as well as Chilean flat oyster (*O. chilensis*), blue mussel (*Mytilus edulis*) and Mediterranean mussel (*M. galloprovincialis*). These recommendations also apply to any other susceptible species referred to in the *Aquatic Manual* when traded internationally.

To date, all species of the genera *Ostrea* and *Mytilus* exposed to *Marteilia refringens* have been shown to be susceptible species. Therefore, all species of these genera should be regarded as potentially susceptible species.

Suspected cases, as defined in the *Aquatic Manual*, of infection with *Marteilia refringens* in species other than those listed in this Article should be referred immediately to the appropriate OIE Reference Laboratory, whether or not clinical signs are associated with the findings.

Article 3.1.5.3.

Commodities

1. When authorising importation or transit of the following commodities (under study), Competent Authorities should not require any *Marteilia refringens* related conditions, regardless of the *Marteilia refringens* status of the exporting country, zone or compartment:
 - a) From the species referred to in Article 3.1.5.2., for any purpose:
 - i) commercially-sterile canned or other heat treated products;
 - ii) gametes, eggs and larvae.

b) The following commodities destined for human consumption from the species referred to in Article 3.1.5.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:

- i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);
- ii) non commercially sterile heat-treated products (e.g. ready prepared meals) that have been heat treated in a manner to ensure the inactivation of the parasite;
- iii) off the shell (chilled or frozen) packaged for direct retail trade;
- iv) half-shell (chilled).

c) All commodities from *Crassostrea gigas*, including the live aquatic animal.

For the commodities referred to in point 1)b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising importation or transit of the ~~following~~ commodities of a species referred to in Article 3.1.5.2., other than commodities referred to in point 1) of Article 3.1.5.3., Competent Authorities should require the conditions prescribed in Articles 3.1.5.7. to 3.1.5.11. relevant to the *Marteilia refringens* status of the exporting country, zone or compartment.

a) aquatic animals;

b) aquatic animal products.

3. When considering the importation or transit of any other commodity from bivalve species not referred to in Article 3.1.5.2. (especially those of the genera *Ostrea* and *Mytilus*) not listed above nor in point 1)c) of Article 3.1.5.3. from an exporting country, zone or compartment not declared free of *Marteilia refringens*, Competent Authorities of the importing country should conduct an analysis of the risk of introduction, establishment and spread of *Marteilia refringens* and the potential consequences associated with importation of the commodity, prior to a decision. The outcome of this assessment should be made available to the exporting country. The exporting country should be informed of the outcome of this assessment.

Article 3.1.5.4.

***Marteilia refringens* free country**

A country may make a self-declaration of freedom from *Marteilia refringens* if it meets the conditions in points 1), 2), 3) or 4) below.

If a country shares a ~~water catchment or coastal zone~~ or compartment with one or more other countries, it can only make a self-declaration of freedom from a *Marteilia refringens* free country if all the areas covered by the shared water are declared *Marteilia refringens* free zones

(see Article 3.1.5.5.).

1. A country where none of the susceptible species ~~species of genera *Ostrea* and *Mytilus*~~ listed in ~~Article 3.1.5.2.~~ is present may make a self-declaration of freedom from *Marteilia refringens* when *basic biosecurity conditions* have been met continuously in the country for at least the past 3 years¹.

OR

2. A country where ~~the~~ any species referred to in Article 3.1.5.2. is present but there has never been any observed occurrence of the *disease* for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter 3.1.5. of the *Aquatic Manual*, may make a self-declaration of freedom from *Marteilia refringens* when *basic biosecurity conditions* have been met continuously in the country for at least the past 3 years and infection with *Marteilia refringens* is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years or where the infection status prior to *targeted surveillance* was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter X.X.X. of the *Aquatic Manual*, may make a self-declaration of freedom from *Marteilia refringens* when:
 - a) *basic biosecurity conditions* have been met continuously for at least the past 3 years; and
 - b) *targeted surveillance* as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual* has been in place for at least the last 2 of the past 3 years² without detection of *Marteilia refringens*.

OR

4. A country that has made a self-declaration of freedom from *Marteilia refringens* but in which the disease is detected may not make a self-declaration of freedom from *Marteilia refringens* again until the following conditions have been met:
 - a) on detection of the disease, the affected area was declared an *infected zone* and a *buffer zone* was established; and
 - b) infected populations have been safely destroyed or removed from the *infected zone* by means that minimise the risk of further spread of the disease, and the appropriate *disinfection* procedures (see *Aquatic Manual*) have been completed; and

- c) *targeted surveillance*, as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual*, has been in place for at least the last 2 of the past 3 years without detection of *Marteilia refringens*.

In the meantime, one or more areas of the remaining territory may be declared free zones, part of the non-affected area may be declared a free zone provided that they meet the conditions in point 3) of Article 3.1.5.5.

Article 3.1.5.5.

Marteilia refringens free zone or free compartment

A *zone* or *compartment* free from *Marteilia refringens* may be established within the *territory* of one or more countries of infected or unknown status for infection with *Marteilia refringens* and declared free by the *Competent Authority(ies)* of the country(ies) concerned, if the *zone* or *compartment* meets the conditions referred to in points 1), 2), 3) or 4) below.

If a *zone* or *compartment* extends over more than one country, it can only be declared a *Marteilia refringens* free *zone* or *compartment* if the conditions outlined below apply to all areas of the *zone* or *compartment*.

1. In a country of unknown status for *Marteilia refringens*, a *zone* or *compartment* where none of the susceptible species ~~species of genera *Ostrea* and *Mytilus* listed in Article 3.1.5.2.~~ is present may be declared free from *Marteilia refringens* when *basic biosecurity conditions* have been met continuously in the *zone* or *compartment* for at least the past 3 years².

OR

2. In a country of unknown status for *Marteilia refringens*, a *zone* or *compartment* where ~~the~~ any species referred to in Article 3.1.5.2. is present but there has never been any observed occurrence of the *disease* for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter X.X.X. of the *Aquatic Manual*, may be declared free from *Marteilia refringens* when *basic biosecurity conditions* have been met continuously in the *zone* or *compartment* for at least the past 3 years and infection with *Marteilia refringens* is not known to be established in wild populations.

OR

3. A *zone* or *compartment* where the last known clinical occurrence was within the past 10 years or where the infection status prior to *targeted surveillance* was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter X.X.X. of the *Aquatic Manual*, may be declared free from *Marteilia refringens* when:

- a) *basic biosecurity conditions* have been met continuously for at least the past 3 years;

and

- b) *targeted surveillance* as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual* has been in place for at least the last 2 of the past 3 years² without detection of *Marteilia refringens*.

OR

4. A zone previously declared free from *Marteilia refringens* but in which the disease is detected may not be declared free from *Marteilia refringens* again until the following conditions have been met:
 - a) on detection of the disease, the affected area was declared an *infected zone* and a *buffer zone* was established; and
 - b) infected populations have been safely destroyed or removed from the *infected zone* by means that minimise the risk of further spread of the disease, and the appropriate *disinfection* procedures (see *Aquatic Manual*) have been completed; and
 - c) *targeted surveillance*, as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual*, has been in place for at least the last 2 of the past 3 years without detection of *Marteilia refringens*.

Article 3.1.5.6.

Maintenance of free status

A country, zone or compartment that is declared free from *Marteilia refringens* following the provisions of points 1) or 2) of Articles 3.1.5.4. or 3.1.5.5., as relevant, may maintain its status as *Marteilia refringens* free provided that *basic biosecurity conditions* are continuously maintained.

A country, zone or compartment that is declared free from *Marteilia refringens* following the provisions of point 3) of Articles 3.1.5.4. or 3.1.5.5., as relevant, may discontinue *targeted surveillance* and maintain its status as *Marteilia refringens* free provided that conditions that are conducive to clinical expression of infection with *Marteilia refringens*, as described in Chapter X.X.X. of the *Aquatic Manual*, exist and *basic biosecurity conditions* are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with *Marteilia refringens*, *targeted surveillance* needs to be continued at a level determined by the *Competent Authority* on the basis of the likelihood of reinfection.

Article 3.1.5.7.

Importation of live animals from a country, zone or compartment declared free from *Marteilia refringens*

When importing live *aquatic animals* of the species referred to in Article 3.1.5.2. from a

country, zone or compartment declared free from *Marteilia refringens*, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 3.1.5.4. or 3.1.5.5. (as applicable), whether the place of production of the consignment is a country, zone or compartment declared free from *Marteilia refringens*.

The certificate ~~shall~~ **should** be in accordance with the Model Certificate No. 3 in Appendix 6.3.1. given in Part 6. of the Aquatic Code.

This Article does not apply to commodities referred to in point 1) of Article 3.1.5.3.

Article 3.1.5.8.

Importation of live animals for aquaculture from a country, zone or compartment not declared free from *Marteilia refringens*

When importing for aquaculture, aquatic animals of the species referred to in Article 3.1.5.2. from a country, zone or compartment not declared free from *Marteilia refringens*, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the consignment is delivered directly into and held in quarantine facilities; and
2. the imported aquatic animals are continuously isolated from the local environment; and
3. all effluent and waste material **from the processing** are treated in a manner that ensures inactivation of *Marteilia refringens*.

This Article does not apply to commodities listed in point 1) of Article 3.1.5.3.

Article 3.1.5.9.

Importation of live animals for processing ~~and/or~~ for human consumption from a country, zone or compartment not declared free from *Marteilia refringens*

When importing, for processing ~~and/or~~ for human consumption, aquatic animals of the species referred to in Article 3.1.5.2. from a country, zone or compartment not declared free from *Marteilia refringens*, the Competent Authority of the importing country should require that assess the risk and apply risk mitigation measures such as:

1. the consignment is delivered directly to and held in quarantine facilities ~~for a short period before~~ until processing and/or consumption; and
2. all effluent and waste material **from the processing** are treated in a manner that ensures inactivation of *Marteilia refringens*.

This Article does not apply to *commodities* referred to in point 1) of Article 3.1.5.3.

Article 3.1.5.10.

Importation of products from a country, zone or compartment declared free from *Marteilia refringens*

When importing *aquatic animal products* of the species referred to in Article 3.1.5.2. from a country, zone or compartment free from *Marteilia refringens*, the *Competent Authority* of the *importing country* should require that the consignment be accompanied by an *international aquatic animal health certificate* issued by the *Competent Authority* of the *exporting country* or a *certifying official* approved by the *importing country*.

This certificate must certify, on the basis of the procedures described in Articles 3.1.5.4. or 3.1.5.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from *Marteilia refringens*.

The certificate ~~shall~~ **should** be in accordance with the Model Certificate No. ~~[X]~~ in Appendix 6.3.2. ~~given in Part 6. of the *Aquatic Code*.~~

This Article does not apply to *commodities* referred to in point 1) of Article 3.1.5.3.

Article 3.1.5.11.

Importation of products from a country, zone or compartment not declared free from *Marteilia refringens*

When importing *aquatic animal products* of the species referred to in Article 3.1.5.2. from a country, zone or compartment not declared free from *Marteilia refringens*, the *Competent Authority* of the *importing country* should assess the risk and apply appropriate risk mitigation measures.

1. ~~Infection with *Marteilia refringens* is a seasonal disease that is usually clinically expressed in the 2nd year of infection. Therefore, 3 years of biosecurity measures is the optimal period to enable the detection of cases of infection with *Marteilia refringens* in molluscs.~~
2. ~~Starting the targeted surveillance in the 2nd year of the biosecurity measures ensures that new cases of infection with *Marteilia refringens* are more likely to be detected.~~

This Article does not apply to *commodities* listed in point 1) of Article 3.1.5.3.